

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-24. (Canceled)

25. (Currently amended) An information backup system comprising:  
a plurality of computer systems, each including a disk subsystem and a network interface, wherein each computer system is configured to direct disk I/O requests to said network interface;  
~~a communication network, to which at least some each of said computer systems is are communicatively coupled, said network configured to communicate said disk I/O requests and data associated with said disk I/O requests among said plurality of computer systems;~~  
a functionally coherent and physically distributed cache memory comprising a plurality of memory portions each within a memory of a computer system among ~~a first set of said said plurality of~~ computer systems; and  
a functionally coherent and physically distributed data storage device comprising a plurality of data storage portions each within a data storage device of a computer system among ~~said first set of plurality of~~ computer systems, ~~at least one of said computer systems being configured to perform data I/O with said functionally coherent and distributed data storage device~~  
wherein said distributed data storage device responds to said disk I/O requests from said plurality of computers as a single logical disk.

26. (Currently amended) The system of claim 25 wherein said functionally coherent and physically distributed cache memory is operable as data cache for said disk I/O operations with said functionally coherent and physically distributed data storage device.

27-29. (Canceled)

1           30.     (Currently amended) The system of claim 25 wherein said functionally  
2 coherent and physically distributed data storage device is configured as a functionally coherent  
3 and physically distributed redundant array of independent disks (RAID) storage device.

1           31.     (Currently amended) The system of claim 25 wherein said memory  
2 portions are portions of volatile random access memories of said ~~first-set~~plurality of computer  
3 systems.

32-36. (Canceled)

1           37.     (Currently amended) A method for operating an information backup  
2 system comprising:  
3                 organizing into a unified logical disk data storage device at least one data storage  
4 portion from each of a ~~first~~ plurality of computer systems of said network; and  
5                 performing data-disk I/O access to the unified data storage device using a  
6 distributed cache memory that includes at least one memory portion from each of a ~~second~~said  
7 plurality of computer systems of said information ~~network~~ backup system.

38-40. (Canceled)

1           41.     (Currently amended) The method of claim 37 further comprising  
2 configuring said distributed data storage device as a distributed redundant array of independent  
3 disks (RAID) storage device.

1           42.     (Previously presented) The method of claim 37 in which volatile  
2 memories are configured as at least some of the memory portions.

43.     (Canceled)

1           44.     (Currently amended) An information backup system comprising:  
2 a plurality of computer systems;

a communication network, to which ~~at least some of~~ said computer systems are communicatively coupled;

a distributed cache memory comprising a plurality of memory portions, each memory portion being a portion of a memory of a computer system among ~~a subset of~~ said plurality of computer systems, said memory portions being organized to function as a single coherent cache memory; and

a distributed data storage device comprising a plurality of data storage portions, each data storage portion being a portion of storage of one or more data storage devices of a computer system among said ~~subset~~ plurality of computer systems, said data storage portions being organized to function as a single data storage device, wherein said computer systems can perform ~~data disk~~ I/O with said distributed data storage device as a single logical disk and wherein said distributed cache memory is operable as a cache memory for said distributed data storage device.

45. (Currently amended) An information backup system comprising:  
a plurality of computer systems;

each computer system among at least a first subset of said computer systems having first means for performing distributed caching, wherein each first means provides a portion of memory from its corresponding computer system, wherein all of said first means cooperate to provide a unified system cache memory from among said portions of memory; and

each computer system among said first subset further having second means for performing distributed data storage, wherein each second means provides a portion of data storage of a data storage device from its corresponding computer system, wherein all of said second means cooperate to provide a single data distributed disk storage device, wherein said computer systems access said single data distributed disk storage device to perform disk I/O as a single logical disk.

46. (Currently amended) A method for an information backup system comprising a plurality of computer systems, the method comprising:

3 | each computer system among ~~a first set of~~ said plurality of computer systems  
4 | providing a portion of its ~~RAM-random access~~ memory, collectively referred to as a plurality of  
5 | memory portions;  
6 | organizing said memory portions into a unified cache memory;  
7 | each computer system among said ~~first set~~ plurality of computer systems  
8 | providing a portion or portions of one or more its data storage devices, collectively referred to as  
9 | a plurality of data storage portions; and  
10 | organizing said data storage portions into a ~~single~~ distributed data storage device;  
11 | and  
12 | providing ~~data-disk~~ I/O access to said ~~single~~ distributed data storage device,  
13 | wherein any of said plurality of computer systems can access said ~~single~~ distributed data storage  
14 | device as a single logical disk.